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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,149	11/21/2003	Steven R. Sedlmayr	AUO1020	2117

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Law Office of Roxana H. Yang
P.O. Box 3986
Los Altos, CA 94024

EXAMINER

FINEMAN, LEE A

ART UNIT	PAPER NUMBER
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2872

DATE MAILED: 06/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

Office Action Summary

Application No.

10/719,149

Applicant(s)

SEDL MAYR, STEVEN R.

Examiner

Lee Fineman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 233-235, 237-249, 251-263, 265-277 and 279-288 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 233-235, 237-249, 251-263, 265-277 and 279-288 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12 April 2005 has been entered.

Claim Objections

2. Claims 237-240, 251-254, 265-268 and 279-282 are objected to because of the following informalities:

Regarding claims 237-238, 251-252, 265-266 and 279-280, the newly amended independent claims 233, 247, 261 and 275 now include step [c] which includes rotating the second selected predetermined orientation of the primary second resolved beam to be substantially the same as the primary first resolved beam. However, claims 237-238, 251-252, 265-266 and 279-280, which depend from independent claims 233, 247, 261 and 275, require that the primary first and second resolved beams have the same selected predetermined orientation as part of step [b], making step [c] redundant.

Regarding claims 239-240, 253-254, 267-268 and 281-282, the newly amended independent claims 233, 247, 261 and 275, changed step [f] to step [g]. Therefore original claims 239-240, 253-254, 267-268 and 281-282 now refer to the wrong step of the independent claim. These claims will be treated as if they refer to step [g].

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 233-234, 237-248, 251-262, 265-276 and 279-288 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atarashi et al., US 5,172,254 in view of Baur et al., US 5,115,305.

Atarashi et al. disclose in fig. 5 a system and method of producing a modulated beam of electromagnetic energy/light, comprising:

[a] means (1 and 2) for providing a substantially collimated (by 2) primary beam of electromagnetic energy/light having a predetermined range of wavelengths and randomly changing orientations of a chosen component of electromagnetic wave field vectors;

[b] means (13) for resolving the primary beam of electromagnetic energy/light into a primary first resolved beam (travels toward 21BP) of electromagnetic energy/light having substantially a first selected predetermined orientation of a chosen component of the electromagnetic wave field vectors (P) and a primary second resolved beam (travels toward 16) of electromagnetic energy having substantially a second selected predetermined orientation of a chosen component of the electromagnetic wave field vectors (S);

[d] means (21BP, 21GP1, 21BS, 21GS1) for separating each of the primary resolved beams of electromagnetic energy/light into two or more separate beams of electromagnetic energy/light, each of the separate beams of electromagnetic energy/light having a selected predetermined orientation of a chosen component of electromagnetic wave field vectors (P or S);

[e] means (15BP, 15GP, 15RP, 15BS, 15GS, 15RS) for altering the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors of a plurality of portions of each of the separate beams of electromagnetic energy/light by passing each of the separate beams of electromagnetic energy/light through a respective one of a plurality of altering means whereby the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors of the plurality of portions of each of the separate beams of electromagnetic energy/light is altered in response to a stimulus means by applying a signal means to the stimulus means in a predetermined manner each of the separate beams of electromagnetic energy/light passes through the respective one of the plurality of means for altering the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors (column 7, line 56-column 8, line 12);

[f] [i] means (21GP2, 21RP) for combining the altered separate beams of electromagnetic energy/light of the primary first resolved beam of electromagnetic energy/light into a first single collinear beam of electromagnetic energy/light without substantially changing the altered selected predetermined orientation of the chosen component of the electromagnetic wave field vectors of the plurality of portions of each of the separate beams of electromagnetic energy/light, and [ii] means (21GS2, 21RS) for combining the altered separate beams of electromagnetic energy/light of the primary second resolved beam of electromagnetic energy/light into a second

single collinear beam of electromagnetic energy/light without substantially changing the altered selected predetermined orientation of the chosen component of the electromagnetic wave field vectors of the plurality of portions of each of the separate beams of electromagnetic energy;

[g] [i] means (17) for resolving from the first single collinear beam of electromagnetic energy a first resolved beam of electromagnetic energy/light having substantially a first selected predetermined orientation of a chosen component of electromagnetic wave field vectors and a second resolved beam of electromagnetic energy/light having substantially a second selected predetermined orientation of a chosen component of electromagnetic wave field vectors, and [ii] means (17) for resolving from the second single collinear beam of electromagnetic energy/light a first resolved beam of electromagnetic energy/light having substantially a first selected predetermined orientation of a chosen component of electromagnetic wave field vectors and a second resolved beam of electromagnetic energy/light having substantially a second selected predetermined orientation of a chosen component of electromagnetic wave field vectors; means (19) for passing at least one of the resolved beams of electromagnetic energy/light from step [g] to a projection means (20), which is a means for passing one of the resolved beams of electromagnetic energy from step [g] [i] to a first side of a projection means (left side 20, in so far as at least part of the beam is projected to the left side) and a means for passing one of the resolved beams of electromagnetic energy from step [g] [ii] to a second side of a projection means (right side 20, in so far as at least part of the other beam is projected to the right side); and means (21GP1, 21GS2 or 15BP, 15GP, 15RP, 15BS, 15GS, 15RS) for adjusting the electromagnetic spectrum of at least one of the separate beams of electromagnetic energy/light; wherein the means for adjusting the electromagnetic spectrum of at least one of the separate

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beams of electromagnetic energy/light is also the separating means and includes means (21GP1, 21GS2) for adjusting a predetermined range of wavelengths of at least one of the separate beams of electromagnetic energy/light or wherein the means for adjusting the electromagnetic spectrum of at least one of the separate beams of electromagnetic energy includes a means (15BP, 15GP, 15RP, 15BS, 15GS, 15RS) for adjusting a magnitude of at least one of the separate beams of electromagnetic energy (column 10, lines 8-11, in so far as density in this context is considered the intensity or magnitude of the light). Atarashi et al. disclose the claimed invention except for [c] means for rotating the second selected predetermined orientation of a chosen component of the electromagnetic wave field vectors of the primary second resolved beam of electromagnetic energy/light to be substantially the same as the first selected predetermined orientation of a chosen component of the electromagnetic wave field vectors of the primary first resolved beam of electromagnetic energy. Baur et al. teaches in fig. 1, system and method of producing a modulated beam of electromagnetic energy/light, comprising which includes resolving, rotating, separating, altering, combining and resolving a beam of electromagnetic energy/light. More specifically Baur et al. teach means (33) for rotating the second selected predetermined orientation (P) of a chosen component of the electromagnetic wave field vectors of the primary second resolved beam (24) of electromagnetic energy/light to be substantially the same (S) as the first selected predetermined orientation (S) of a chosen component of the electromagnetic wave field vectors of the primary first resolved beam (26) of electromagnetic energy (column 9, lines 21-28, as well as a second means (45) to be able to recombine the altered beams with a polarized beam splitter (see column 8, lines 2-10). It would have been obvious to one of ordinary skill in the art at the time the invention was made to add the means to rotate polarization of Baur et al. to

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the system of Atarashi et al. to be able to use components with like polarizers thus reducing the number of different parts in the system. The method of utilizing the structure of the claim is inherent therein.

5. Claims 235, 249, 263 and 277 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atarashi et al. in view of Baur et al. as applied to claims 233, 247, 261 and 275 above, and further in view of Konno et al., US 4,497,015.

Atarashi et al. in view of Baur et al. as applied to claims 233, 247, 261 and 275 above disclose the claimed invention except for the primary beam being a having a rectangular cross sectional area. Konno et al. disclose a light illumination device (fig. 5) that produces a primary beam (at M) that has a rectangular cross sectional area (using lens element 102, fig. 3; column 3, lines 5-8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the light source of Atarashi et al. in view of Baur et al. with that of Konno et al. to meet the needed rectangular shape for a particular component, application or device (Konno, column 3, lines 3-5).

Response to Arguments

6. Applicant's arguments with respect to claims 233-235, 237-249, 251-263, 265-277 and 279-288 have been considered but are moot in view of the new ground(s) of rejection.

7. It is noted by the Examiner that the claim objections and 112 rejections made in the previous Office Action have been withdrawn due to amendment by the Applicant.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lee Fineman whose telephone number is (571) 272-2313. The examiner can normally be reached on Monday - Friday 7:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



LAF

June 14, 2005



MARK A. ROBINSON
PRIMARY EXAMINER